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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,582	08/20/2001	Mohammad Torabi	LUTZ 2 00405	5639
48116	7590	02/21/2008		
FAY SHARPE/LUCENT 1100 SUPERIOR AVE SEVENTH FLOOR CLEVELAND, OH 44114			EXAMINER BATURAY, ALICIA	
			ART UNIT 2155	PAPER NUMBER
			MAIL DATE 02/21/2008	DELIVERY MODE PAPER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

Application Number: 09/933,582
Filing Date: August 20, 2001
Appellant(s): TORABI, MOHAMMAD

FEB 21 2008

Technology Center 2100

Joseph D. Dreher
(Reg. # 37,123)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 05 October 2007 appealing from the Office action mailed 04 January 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

U.S. 6,215,498	Filo et al.	04-2001
U.S. 6,711,147	Barnes et al.	03-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filo et al. (U.S. 6,215,498) and further in view of Barnes et al. (U.S. 6,711,147).

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filo et al. (U.S. 6,215,498) and further in view of Barnes et al. (U.S. 6,711,147).

Filo teaches the invention substantially as claimed including a virtual work environment that emulates an actual military command post, with all of the instruments and familiar surroundings emulated in function if not in form. The terminal users of the environment (i.e., the commanders and staff) immerse in this

environment via virtual reality displays (audio and video) and inputs (microphone, body encoders and pointing devices) connected to individual personal computers. The avatars are able to interact with one another in the virtual environment and they are able to select and manipulate functional objects displayed in the virtual work environment (see Abstract).

3. With respect to claim 1, Filo teaches a virtual reality system, comprising: at least one virtual reality environment user equipment (VUE) operative to capture and transmit (Filo, col. 7, lines 26-30) real-world video and audio data (Filo, col. 3, lines 2-37 and col. 6, line 63 – col. 7, line 12) and to display received virtual reality data representing an actual physical environment (Filo, col. 2, lines 45-61); at least one virtual reality environment core system (VCS), wherein: the core system is in communication with at least two virtual reality environment subscriber databases (VSD), one of which has a relatively local location and at least one of which has a relatively remote location (Filo, col. 6, lines 33-52); the virtual reality environment core system being in wireless communication with the at least one VUE (Filo, col. 6, lines 22-27), the core system being operative to access the relatively local VSD, to retrieve respective subscription information of the at least one VUE if the core system is a respective home core system of the at least one VUE (Filo, col. 10, lines 35-51), and a virtual reality environment episode manager (VEME) which is in communication with the at least one virtual reality environment core system and is operative to forward the virtual reality data representing the environment to the at

least one VUE and receive the real-world video and audio data from the at least one VUE, thereby facilitating a virtual reality episode (Filo, col. 6, lines 33-52).

Filo does not teach differentiating between local and remote subscription information databases.

However, Barnes teaches the core system being operative to access at least one of the at least one relatively remotely located VSD to retrieve respective subscription information of the at least one VUE if the core system is a visited virtual reality core system relative to the at least one VUE (Barnes, col. 12, line 55 – col. 13, line 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Filo in view of Barnes in order to enable differentiating between local and remote subscription information databases. One would be motivated to do so in order to allow a mobile node to seamlessly roam between networks.

4. With respect to claim 2, Filo teaches the invention described in claim 1, including the virtual reality system where the at least one virtual reality environment user equipment (VUE) is operative to capture the virtual reality data in real-time (Filo, col. 3, lines 60-67).
5. With respect to claim 3, Filo teaches the invention described in claim 1, including the virtual reality system where the at least one virtual reality environment user equipment (VUE) is operative to display the virtual reality data in real-time (Filo, col. 3, lines 60-67).

6. With respect to claim 4, Filo teaches the invention described in claim 1, including a virtual reality system, further comprising:

At least one additional VUE in hardwired communication with at least one of the at least one VCS (Filo, col. 7, lines 30-50).

7. With respect to claim 5, Filo teaches the invention described in claim 1, including the virtual reality system where the virtual reality episode is conducted between a plurality of virtual reality environment user equipment (VUE) (Filo, col. 6, lines 10-32).

8. With respect to claim 6, Filo teaches the invention described in claim 1, including a virtual reality system, comprising:

A virtual reality environment access system (VAS), wherein the virtual reality environment access system facilitates the wireless communication of the at least one virtual reality environment user equipment with the at least one virtual reality environment core system (Filo, col. 6, lines 22-27).

9. With respect to claim 7, Filo teaches the invention described in claim 1, including the virtual reality system where one of the at least one virtual reality core systems (VCS) comprises a virtual reality entity subscription database (VSD) (Filo, col. 10, lines 35-51).

10. With respect to claim 8, Filo teaches the invention described in claim 1, including the virtual reality system where the virtual reality environment episode management entity (VEME) is located within one of the at least one virtual reality environment core system (VCS) (Filo, col. 6, lines 33-52).
11. With respect to claim 9, Filo teaches a method of enabling the real-time establishment and conduction of a real-time virtual reality episode (VRE), comprising: receiving a request for establishing a virtual reality episode (VRE) from VRE user equipment (VUE); accessing a relatively local virtual reality environment subscriber database (VSD) to retrieve subscription information associated with the VUE (Filo, col. 10, lines 35-51) if an entity receiving the request is a respective home virtual reality core system of the VUE (Filo, col. 6, lines 33-52); receiving real time virtual reality data at a virtual reality environment (VRE) episode management entity (VEME) (Filo, col. 3, lines 60-67), wherein the virtual reality data is representative of an actual physical environment (Filo, col. 2, lines 45-61); determining, at a VRE episode management entity, that the virtual reality data is associated with the requested virtual reality episode; and forwarding, based on the accessed subscription information, at least a portion of the virtual reality data to the VUE (Filo, col. 6, lines 33-52), wherein the VRE user equipment is in wireless communication with the VRE episode management entity (VEME) (Filo, col. 6, lines 22-27), and wherein the VRE user equipment (VUE) is operative to capture, transmit (Filo, col. 7, lines 26-30) and display virtual reality data (Filo, col. 3, lines 2-37 and col. 6, line 63 – col. 7, line 12).

Filo does not teach differentiating between local and remote subscription information databases.

However, Barnes accessing a relatively remote VSD to retrieve respective subscription information of the VUE if the entity receiving the request is a visited virtual reality core system (VCS) relative to the VUE (Barnes, col. 12, line 55 – col. 13, line 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Filo in view of Barnes in order to enable differentiating between local and remote subscription information databases. One would be motivated to do so in order to allow a mobile node to seamlessly roam between networks.

12. With respect to claim 10, Filo teaches the invention described in claim 9, including further comprising capturing and transmitting (Filo, col. 7, lines 26-30) in real time, virtual reality data representative of an actual physical environment prior to receiving the real time virtual reality data at a virtual reality environment (VRE) episode management entity (VEME) (Filo, col. 2, lines 45-61).

13. With respect to claim 11, Filo teaches the invention described in claim 10, including where capturing in real time, virtual reality data comprises capturing real time audio associated with the actual physical environment (Filo, col. 3, lines 2-37 and col. 6, line 63 – col. 7, line 12).

14. With respect to claim 12, Filo teaches the invention described in claim 10, including the method wherein capturing in real time virtual reality data comprises capturing in real time virtual reality data representative of an actual physical environment (Filo, col. 2, lines 45-61) located geographically distant from the VRE user equipment (VUE) (Filo, col. 6, lines 10-27).
15. With respect to claim 13, Filo teaches the invention described in claim 9, including the method further comprising identifying the VRE user equipment (VUE) as participating in the virtual reality episode prior to forwarding at least a portion of the virtual reality data to the VRE user equipment (VUE) (Filo, col. 10, lines 35-51).
16. With respect to claim 14, Filo teaches the invention described in claim 9, including the method further comprising determining the location of the VRE user equipment (VUE) prior to forwarding at least a portion of the virtual reality data to the VRE user equipment (VUE) (Filo, col. 10, lines 35-51).
17. With respect to claim 15, Filo teaches the invention described in claim 9, including the method wherein determining the location of the VRE user equipment (VUE) comprises querying a database for the location of the VRE user equipment (VUE) (Filo, col. 10, lines 35-51).
18. With respect to claim 16, Filo teaches a virtual reality system that enables the real-time conduction of a virtual reality episode, comprising: at least one virtual

reality environment user equipment (VUE) operative to capture and display virtual reality data associated with at least one user (Filo, col. 3, lines 2-37 and col. 6, line 63 – col. 7, line 12); at least one virtual reality environment core system (VCS), where the at least one VCS has a pre-existing relationship with one of the at least one VUE and the at least one user (Filo, col. 10, lines 35-51); a plurality of virtual reality environment access systems (VAS), where each respective VAS of the plurality provides wireless connectivity for respective ones of the at least one VUE (Filo, col. 6, lines 22-27), where the respective VAS relays messages between the VUE and the at least one VCS; and a virtual reality environment episode management entity (VEME), in communication with the at least one user and the at least one VCS (Filo, col. 6, lines 33-52), where the VEME forwards real time virtual reality data (Filo, col. 3, lines 60-67) representative of an actual physical environment (Filo, col. 2, lines 45-61) to the at least one VUE associated with the at least one user through wireless connectivity services (Filo, col. 6, lines 22-27) of the respective VAS currently serving the at least one VUE of the at least one user based on VUE or user location and/or mobile link information maintained by the VEME (Filo, col. 6, lines 33-52).

Filo does not teach differentiating between local and remote subscription information databases.

However, Barnes teaches where responsibility for providing connectivity is handed off from a first respective VCS to a second respective VCS if the respective ones of a the at least one VUE move out of a first geographic region served by the first respective VCS and into a second geographic region that is served by the second respective VCS (Barnes, col. 12, line 55 – col. 13, line 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Filo in view of Barnes in order to enable differentiating between local and remote subscription information databases. One would be motivated to do so in order to allow a mobile node to seamlessly roam between networks.

19. With respect to claim 17, Filo teaches a method of participating in a real-time virtual reality episode, comprising: providing a virtual reality environment user equipment (VUE), wherein the virtual reality user equipment (VUE) captures and displays virtual reality data representing an actual physical environment associated with a first user (Filo, col. 2, lines 45-61); wirelessly (Filo, col. 6, lines 22-27) transmitting the captured virtual reality data to a first virtual reality environment access systems (VAS) (Filo, col. 7, lines 26-30); communicating the captured virtual reality data to intervening network elements including a second VAS (Filo, col. 6, lines 33-52); accessing a relatively local virtual reality environment subscriber database (VSD) to retrieve subscription information associated with a second user participating in the virtual reality episode (Filo, col. 10, lines 35-51), if an entity in communication with the second user is a home virtual reality core system (H-VCS) of the second user (Filo, col. 6, lines 22-32); and wirelessly (Filo, col. 6, lines 22-27) transmitting the virtual reality data from the second VAS to the second user as authorized by the subscription information associated with the second user (Filo, col. 7, lines 26-30), wherein the second VAS and the second user are geographically remote from the first user (Filo, col. 6, lines 10-52).

Filo does not teach differentiating between local and remote subscription information databases.

However, Barnes teaches accessing a relatively remote VSD to retrieve subscription information of the second user if the entity in communication with the second user is a visited virtual reality core system (V-VCS) relative to the second user (Barnes, Fig. 4, elements 20 and 286; col. 8, line 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Filo in view of Barnes in order to enable differentiating between local and remote subscription information databases. One would be motivated to do so in order to allow a mobile node to seamlessly roam between networks.

20. With respect to claim 18, Filo teaches the invention described in claim 17, including the method further comprising receiving, from the second user, data representing one or more actions performed by the second user (Filo, col. 7, lines 26-30).

21. With respect to claim 19, Filo teaches the invention described in claim 17, including the method wherein wirelessly (Filo, col. 6, lines 22-27) transmitting occurs automatically after the VRE user equipment captures the virtual reality data (Filo, col. 7, lines 26-30).

22. With respect to claim 20, Filo teaches a system that is operative to provide virtual reality data services to a subscriber using virtual reality environment user equipment (VUE), the system comprising: a virtual reality environment episode management entity (VEME) that is operative to manage, coordinate, synchronize and maintain event information between participants and information sources associated with a virtual reality episode; a virtual reality environment control entity (VECE) that is operative to control virtual reality episodes associated with the subscriber or the VUE (Filo, col. 6, lines 33-52) by accessing a local virtual reality environment subscriber database (VDS) if the VECE is a home VECE of the subscriber or VUE, to determine subscription information associated with the subscriber and/or the VUE, and providing system access and/or services to the VUE (Filo, col. 10, lines 35-51), relaying messages between the VUE and the VEME according to the subscriber information and the mobile links (Filo, col. 6, lines 33-52), and a virtual reality environment access system (VAS), where the VAS provides wireless connectivity for the VUE if the VUE is located in a respective geographic region served by the VAS (Filo, col. 6, lines 22-27), and where the VAS relays messages between the VUE and the VECE (Filo, col. 6, lines 33-52).

Filo does not teach differentiating between local and remote subscription information databases.

However, Barnes teaches accessing a remote virtual reality environment subscriber database (VSD) (Barnes, Fig. 4, elements 20 and 286; col. 8, line 12), if the VECE is a visited VECE relative to the subscriber or VUE, (Barnes, col. 12, line 55 – col. 13, line 1), where the responsibility for providing connectivity is handed off

from the VECE if the VUE moves out of a first geographic region served by the first VECE (Barnes, col. 12, line 55 – col. 13, line 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Filo in view of Barnes in order to enable differentiating between local and remote subscription information databases. One would be motivated to do so in order to allow a mobile node to seamlessly roam between networks.

23. With respect to claim 21, Filo teaches the invention described in claim 20, including the system comprising: at least one additional virtual reality environment VECE that is operative to control virtual reality episodes associated with at least one additional subscriber using at least one additional VUE (Filo, col. 6, lines 33-52) by accessing a local virtual reality environment subscriber database (VSD) if the VECE is a home VECE of the at least one additional subscriber or VUE, to determine at least one additional set of subscription information associated with the at least one additional subscriber and/or the at least one additional VUE, and providing system access and/or services to the at least one additional VUE (Filo, col. 10, lines 35-51), relaying messages between the at least one additional VUE and the VEME according to the subscriber information and the mobile links (Filo, col. 6, lines 33-52), where each respective additional VAS provides wireless connectivity for the at least one additional VUE if the at least one additional VUE is located in a respective geographic region served by the respective additional VAS (Filo, col. 6, lines 22-27), and where the respective additional VAS relays messages between the at least one

additional VUE and a respective one of the at least one additional VECE (Filo, col. 6, lines 33-52).

Filo does not teach differentiating between local and remote subscription information databases.

However, Barnes teaches accessing a remote virtual reality environment subscriber database (VSD), if the VECE is a visited VECE relative to the at least one additional subscriber or VUE, and at least one additional virtual reality environment access systems (VAS) associated with the at least one additional VECE (Barnes, col. 12, line 55 – col. 13, line 1), and where responsibility for providing connectivity is handed off from a first respective additional VAS to a second respective additional VAS if the at least one additional VUE moves out of a first additional geographic region served by the respective first additional VAS and into a second additional geographic region that is served by a second respective additional VAS (Barnes, col. 12, line 55 – col. 13, line 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Filo in view of Barnes' in order to enable differentiating between local and remote subscription information databases. One would be motivated to do so in order to allow a mobile node to seamlessly roam between networks.

24. With respect to claim 22, Filo teaches the invention described in claim 21, including the system comprising: at least one additional virtual reality environment VECE that is operative to control virtual reality episodes associated with at least one

additional subscriber using at least one additional VUE (Filo, col. 6, lines 33-52) by accessing a local virtual reality environment subscriber database (VSD) if the VECE is a home VECE of the at least one additional subscriber or VUE, to determine at least one additional set of subscription information associated with the at least one additional subscriber and/or the at least one additional VUE, and providing system access and/or services to the at least one additional VUE (Filo, col. 10, lines 35-51), relaying messages between the at least one additional VUE and the VEME according to the subscriber information and the mobile links (Filo, col. 6, lines 33-52), where each respective additional VAS provides wireless connectivity for the at least one additional VUE if the at least one additional VUE is located in a respective geographic region served by the respective additional VAS (Filo, col. 6, lines 22-27), and where the respective additional VAS relays messages between the at least one additional VUE and a respective one of the at least one additional VECE (Filo, col. 6, lines 33-52).

Filo does not teach differentiating between local and remote subscription information databases.

However, Barnes teaches a virtual reality environment gateway entity that is operative to provide boundary entity services that facilitate a communication of messages between the VECE and the at least one additional VECE, the boundary entity services including at least one of firewall services hiding underlying network structure, facilitating the flow and routing of virtual reality episode control signals, and converting or translating signals or protocols between elements of the system (Barnes, Fig. 4, element 264; col. 8, line 63 – col. 9, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Filo in view of Barnes in order to enable differentiating between local and remote subscription information databases. One would be motivated to do so in order to allow a mobile node to seamlessly roam between networks.

(10) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses them individually.

(A) Appellant Argues: Barnes is related to a merged packet service and mobile internet protocol (title) and is unrelated to virtual reality systems and methods.

In Response: The examiner respectfully submits that in response to appellant's argument that Barnes is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Filo discloses a virtual command post (VCP) that is a simulation of an actual physical military command post (see Filo, col. 2, lines 45-55). The computers for each participant are networked to other command participants via military networks (see Filo, col. 4, lines 22-23). The VCP allows a plurality of real world users may participate and collaborate in the VCP. The kind of real world users may

include personnel within a mobile communications shelter (see Filo, Fig. 1, elements 18 and 19; col. 6, lines 12-22). The local VCP may be linked to "other networks," which may comprise of subordinate VCPs (see Filo, Fig. 1, elements 22, 24, 26 and 28; col. 6, lines 33-37). Barnes discloses a method that allows the mobile node to transition from a first routing area to a second routing area in various combinations of networks (see Barnes, col. 4, lines 60-63), thus a mobile node may seamlessly roam between two different networks (see Barnes, col. 5, lines 66-67). Because Filo discloses the use of a mobile communications shelter connecting to a VCP, it would stand to reason that Filo would be concerned with connecting mobile nodes to an established network. Thus Barnes disclosure pertaining to connecting mobile nodes to networks would be considered analogous art.

(B) Appellant Argues: Filo does not disclose or suggest that virtual command post participants are mobile.

In Response: The examiner respectfully submits that Filo teaches virtual command post participants are mobile (the kind of real world users, may include: personnel within a mobile communications shelter – see Filo, Fig. 1, elements 18 and 19; col. 6, lines 17-22).

(C) ***Appellant Argues:*** There is no motivation for combining Filo and Barnes other than that which could be gleaned from the present application. Accordingly, the rejection is based on impermissible hindsight reasoning.

In Response: The examiner respectfully submits that in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, the motivation given for combining Filo and Barnes, allowing a mobile node to seamlessly roam between networks, can be found in col. 5, lines 66-67 in Barnes.

Moreover, as discussed by the Supreme Court in KSR (see *KSR International Co. v. Teleflex Inc.*, 550 U.S.—, 82 USPQ2d 1385 (2007)) there are other rationales that support the examiner's conclusion that the claimed invention is obvious. For example all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Filo was used as the primary reference, which is seen as disclosing all of the claimed subject matter except differentiating between local and remote subscription information databases. However, the local and remote database

limitations are covered by Barnes. So all of the component parts of the claim are known in Filo and Barnes. Thus, it would have been obvious to one having ordinary skill in the art to use the local and remote databases taught by Barnes with the virtual reality environment discussed in the Filo reference, since local and remote databases could be used in combination with a virtual reality system to achieve the predictable results of seamlessly maintaining contact with the host as the user changes networks.

(D) Appellant Argues: Filo and Barnes do not disclose, suggest, or even contemplate virtual reality user equipment operative to capture and transmit real world video or a virtual reality environment episode management entity that is operative to receive real world video.

In Response: The examiner respectfully submits that Filo teaches virtual reality user equipment operative to capture (the computer terminal apparatus for the executive level participant includes: a wearable computer; display means for displaying the virtual work environment and for displaying animated characters or "avatars" representing other immersed users in attendance in the virtual work environment and for displaying functional objects in the virtual work environment – see Filo, col. 3, lines 2-37) and transmit (the executive user is provided with a radio and modem that is linked to the wearable computer and that is effective to transmit updated changes in voice and position data via the network to the personal computers of all the other user in attendance in the virtual environment – see Filo, col. 7, lines 26-30) real world video (executive level users

are provided with a personal set of virtual tools that allow these users to perform many work activities while immersed in the virtual environment such as Virtual Video phone allows for one of the video walls to become a two way screen to receive live video and audio data streams from the real world – see Filo, col. 4, lines 6-18 and col. 13, lines 44-55).

Filo also teaches a virtual reality environment episode management entity (VCP – see Filo, col. 5, lines 38-39) that is operative to receive real world video (Virtual Video phone allows for one of the video walls [in the Command Room] to become a two way screen to receive live video and audio data streams from the real world – see Filo, Fig. 7, col. 13, lines 6-55).

(E) *Appellant Argues:* Filo and Barnes do not disclose or suggest receiving real time virtual reality data at a virtual reality environment episode management entity, wherein the virtual reality data is representative of an actual physical environment.

In Response: The examiner respectfully submits that Filo teaches receiving real time virtual reality data at a virtual reality environment episode management entity (The avatars in the virtual work environment can view the “in progress” work of the staff level user in real time by simply “clicking on” the displayed functional object representing that particular staff level user. This information can be projected on a virtual screen display or video wall for viewing by all the other avatars in the virtual work environment – see Filo, col. 3, lines 60-67), wherein the virtual reality data is representative of an actual physical

environment (we have created a novel virtual reality environment that emulates today's physical military command post, referred to hereafter as the Virtual Command Post ("VCP")). The VCP is a simulation of an actual command post, with all of the instruments and familiar surroundings emulated in function if not in form. The commander and his staff immerse in this environment via virtual reality displays (audio and video) and inputs (microphone, body encoders and pointing devices) connected to individual personal computers – see Filo, col. 2, lines 45-48 and 55-61).

(F) *Appellant Argues:* Filo does not disclose or suggest virtual reality environment subscriber databases. Moreover, Filo does not disclose or suggest relatively local and/or relatively remote subscriber databases.

In Response: The examiner respectfully submits that Filo teaches virtual reality subscriber databases (When a user immerses into the VCP environment, there is an initial identification process that takes place whereby the user is identified by some characteristic unique to the individual. The identification process is a security clearance that, once completed, allows the identified user to access files and information for which he is authorized – see Filo, col. 10, lines 35-51). A user cannot be authorized to enter the VCP environment unless he or she has previously subscribed and setup an account including a unique user characteristic that can later be identified the user subsequently.

Moreover, Filo teaches relatively local and/or relatively remote subscriber databases (The VCP in Fig. 1 represents a local network for the depicted participants. The

local VCP may be linked to "other networks." The "other networks" may comprise other remote VCPs – see Filo, Fig. 1, elements 10, 24, 26, 28 and col. 6, lines 33-52). Each VCP includes an authentication method for a number of participants 12, 14, 16 and 18 in Fig. 1, as detailed in the previous paragraph, so it would be obvious to store these login credentials in a database. Therefore a local VCP would have these login credentials for participants 12, 14, 16 and 18 stored locally, whereas a remote VCP would have remote authentication credentials for their respective participants in respective remote databases.

(G) Appellant Argues: Filo does not disclose or suggest a virtual reality core system (VCS) being in wireless communication with at least one VUE.

In Response: The examiner respectfully submits that Filo teaches a virtual reality core system (VCS) being in wireless communication with at least one VUE (a plurality of real world users may participate and collaborate in the VCP. The kind of real world users, may include: personnel within a mobile communications shelter – see Filo, Fig. 1, elements 18 and 19; col. 6, lines 17-22).

(H) Appellant Argues: However, the cited portion of Barnes, column 12, line 55 – column 13, line 1, does not mention a local or remote subscription information database.

In Response: The examiner respectfully submits that Barnes teaches a local (foreign agent 10b maintains a visitor list of all the visiting mobile nodes – see Barnes, Fig. 2, element 106b; col. 3, lines 64-65) and remote subscription information database (home agent 106a, when the mobile node is away from home, it registers its care-of address with its home agent – see Barnes, Fig. 2, element 106a; col. 3, lines 50-52). When mobile node is at position A in Fig. 2, foreign agent 106b is local to it and home agent 106a is currently remote to the mobile node.

(I) Appellant Argues: It is unclear which element discussed in the cited portion of Filo the Office Action considers to be analogous to a VAS system. Moreover, it is unclear which elements discussed in the cited portion of the Office Action considers to be analogous to a plurality of virtual reality access systems.

In Response: The examiner respectfully submits that in addition to the definition of the VAS given in the claim limitations, paragraphs 28 and 29 in Appellant's specification define the VAS as "The VUE is in communication with a VRE Access System (VAS), which is an intermediate component of the VRE system linking the VUE to a VRE Core Network System (VCS)...The VAS provides the VUE access to the VCS." Filo teaches that when a user immerses into the VCP environment, there is an initial identification process, whereby the user is identified by some characteristic unique to the individual. Once this process is complete, the VCP creates or downloads an avatar for the user, the user can access authorized files and information, and communicate with

other users currently in the VCP environment (see Filo, col. 10, lines 35-51). This process connects the VUE (the user's virtual reality gear) to the VCS (Virtual Command Post, VCP). Because many users are immersed in the VCP, as discussed above, each user must go through this authentication procedure that links each user to the virtual reality environment, and thus is functionally equivalent to the claimed VAS.

(J) Appellant Argues: However, the cited portion of Filo is silent with regard to determining that the virtual reality data is associated with a requested episode.

In Response: The examiner respectfully submits that Filo teaches determining that the virtual reality data is associated with a requested episode (when a user immerses into the VCP environment, there is an initial identification process that takes place whereby the user is identified by some characteristic unique to the individual.... Once this process is complete, the VCP creates or downloads an avatar for the user, the user can access authorized files and information, and communicate with other users currently in the VCP environment – see Filo, col. 10, lines 35-51). After the user is authenticated to enter the VCP episode, virtual reality data, such as the ability to see other users of the VCP, is forwarded to the newly authenticated user.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

/Alicia Baturay/

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31 December 2007

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